

DELVE REPORT 2003

JANUARY

U.K. REVEALS UFO REPORT

BY PETER GOODSPEED

After two decades of secrecy and alleged cover-ups, Britain's Ministry of Defence has been forced to release all its files on a reported UFO sighting that has long been dubbed "Britain's Roswell."

As the result of an experiment in more open government, Britain's Parliamentary Ombudsman has ordered the Ministry of Defence to open its "Rendlesham File," which details a 1980 sighting of a glowing triangular-shaped UFO that allegedly crashed in a pine forest surrounding a Royal Air Force base that was being used by NATO to store nuclear weapons.

Over the years, the sighting at RAF Woodbridge, near Ipswich in eastern England, became a classic close encounter of the third kind, with some published reports claiming U.S. military police stationed at the air base had met and conversed with intergalactic aliens who were 1.5 metres tall and dressed in nylon coated pressure suits.

The aliens were said to have spoken in electronically synthesized voices with a strong American accent. And in some reports, the Americans are said to have helped the aliens repair their damaged space ship. Over the years the incident has become almost as famous among UFO enthusiasts as the allegedly secret recovery of the bodies of space aliens from a crashed spaceship in Roswell, N.M., in 1947.

For the past 20 years, UFO enthusiasts have inundated British officials with requests for more information regarding the alleged sighting, only to be repeatedly told the incident had been dismissed after "no evidence was found of any threat to the defence of the United Kingdom."

Last week, however, Britain's Parliamentary Ombudsman Ann Abraham ordered the Ministry of Defence to release its "Rendlesham File," named after the forest outside the base, after concluding defence officials had repeatedly suppressed documentation on the case.

Fewer than 20 people had seen

the file prior to last week's ruling. Now, the archive documents surrounding the sighting have been placed on Britain's Ministry of Defence Internet Web site (www.mod.uk).

While they contain no reference to any direct contact with aliens, the documents do depict two bewildering and frightening nights in late 1980 in which at least seven U.S. servicemen encountered something strange and unexplained in a misty forest surrounding their nuclear weapons base.

A memo drafted by Lieutenant-Colonel Charles Halt of the U.S. Air Force, the Deputy Commander of RAF Bentwaters, which was adjacent to RAF Woodbridge, describes the two unexplained sightings in detail.

Around 3 a.m. on Dec. 27, 1980 two U.S. Air Force security police patrolling the perimeter of RAF Woodbridge reported seeing unusually bright lights at the back of the base.

"Thinking an aircraft might have crashed or been forced down, they called for permission to go outside the gate to investigate," Lt.-Col. Halt's report says. "The on-duty flight chief responded and allowed three patrolmen to proceed on foot. The individuals reported seeing a strange glowing object in the forest. The object was described as being metallic in appearance and triangular in shape, approximately two to three metres across the base and approximately two metres high.

"It illuminated the entire forest with a white light.

"The object itself had a pulsing red light on top and a bank[s] of bluelights underneath. The object was hovering or on legs.

"As the patrolmen approached the object, it manoeuvred through the trees and disappeared."

The security detail reported that as the UFO departed, animals on a nearby farm "went into a frenzy."

The next day, as U.S. officials investigated the UFO site, they discovered three depressions in the ground approximately "1.5 inches deep and 7 inches in diameter."

The ground appeared to be "blasted or scuffed-up" and trees in the vicinity had been scarred on one side, in a circle, all around the landing site. Tree branches, some

as thick as an inch in diameter, had been broken off surrounding trees as high as three metres.

On the night of Dec. 29, Lt.-Col. Halt and a team of three other military experts toured the site, equipped with a Geiger counter and a Starlight night vision scope.

When they checked the depressions in the ground allegedly left by the UFO, the investigators recorded radiation readings that were "significantly higher than the average background readings" one would expect to find.

"Beta/gamma readings of 0.1 miliroentgens were recorded with peak readings in the three depressions and near the centre of the triangle formed by the depressions," Lt.-Col. Halt said. "A nearby tree had moderate readings on the side of the tree toward the depressions."

As the men worked, they also tape recorded their conversations.

Around 1:30 a.m., just after the bells of a local church tolled across the dark, cold forest, the U.S. military investigators noted that there were "very strange sounds out of the [nearby] farmer's barnyard animals."

"They're very, very active, making an awful lot of noise," Lt.-Col. Halt says into his tape.

Just then, the team members all witnessed a sudden bright light among the trees of the forest.

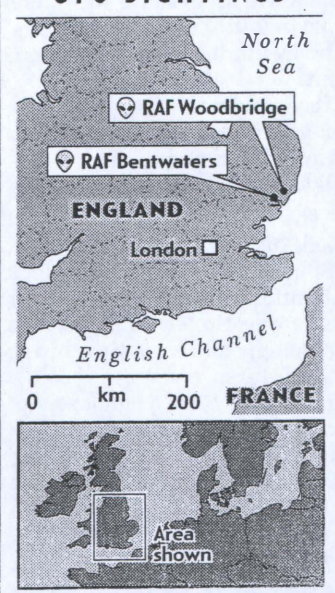
"It's a strange, small red light, looks maybe a quarter to a half mile, maybe further out," Lt.-Col. Halt reports as he and his men started to move through the woods trying to get a closer look.

"A red, sun-like light was seen through the trees," he reported later. "It moved about and pulsed. At one point it appeared to throw off glowing particles and then broke into five separate white objects and then disappeared.

"Immediately thereafter, three star-like objects were noticed in the sky, two objects to the north and one to the south, all of which were about 10 degrees off the horizon."

The objects "moved rapidly, in sharp angular movements and displayed red, green and blue lights," the report says. The two objects in the north appeared to be elliptical when viewed through binoculars, then they turned into full circles and disappeared, after hanging in the sky

UFO SIGHTINGS



NATIONAL POST

for an hour.

The object to the south remained visible for up to three hours, hovering over RAF Woodbridge while it "beamed down a stream of light from time to time," Lt.-Col. Halt said, adding that "numerous individuals witnessed the activities."

A Ministry of Defence memo included in the file shows considerable skepticism about the sightings, although it said the department was "open-minded" about them.

"No evidence was found of any threat to the defence of the United Kingdom, and no further investigations were carried out," the memo said.

"No further information has come to light which alters our view that the sightings of these lights was of no defence significance. No unidentified object was seen on radar during the period in question, and there was no evidence of anything having intruded into U.K. airspace, and landed near RAF Woodbridge."

British officials theorized that the U.S. airmen actually saw the beam of the Orford Ness lighthouse, located about 11 kilometres up the coast from RAF Woodbridge, "with distortions being caused by the beam having been seen through the trees."

Continued on the following page

Bigfoot a big hoax: Fabled ape a wife in a gorilla suit

NATIONAL POST, SATURDAY, DECEMBER 7, 2002

BY MICHAEL HIGGINS

The family of the man who first brought Bigfoot to public attention has revealed how he fooled the world for decades with wood carvings to create "footprints" and by filming his wife in an ape suit.

Ray Wallace, 84, died last month from heart failure and his family have now revealed that Bigfoot was nothing but a hoax.

"The reality is, Bigfoot just died," his son, Michael, said.

Some experts on the American Abominable Snowman had for years questioned Mr. Wallace's amazingly close relationship to the creature.

In August, 1958, a bulldozer operator who worked for Mr. Wallace's construction company in Humboldt County, Calif., found huge footprints circling and then leading away from his rig.

The *Humboldt Times* newspaper in Eureka, Calif., coined the term Bigfoot in a front-page story about the phenomenon and a myth was born.

Over the years, Mr. Wallace took pictures and 16mm film of Bigfoot engaged in numerous activities, among them a pregnant Bigfoot sitting on a log, a Bigfoot throwing stones and a Bigfoot eating frogs.

Mark Chorvinsky, editor of *Strange* magazine, investigated the "pregnant Bigfoot" and in a skeptical 1994 article posed the question, "Is the 'creature' in the photograph a 'real Bigfoot' or a 'guy-in-a-suit'?"

It now appears it was most likely a "gal-in-a-suit."

Mr. Wallace's family revealed many of the photographs were in fact relatives — usually his wife, Elna — dressed in a hairy ape suit with giant feet stuck to the bottom.

Mr. Wallace created the origi-

nal tracks in 1958 when he asked a friend to carve 40-centimetre-long feet.

He and his brother, Wilbur, then wore them to create the Bigfoot prints.

The most famous evidence for Bigfoot's existence, the so-called Patterson film, a grainy, cinefilm image of an erect ape-like creature, was taken by Roger Patter-

AMERICA GOT ITS OWN MONSTER ... THANKS TO RAY WALLACE

son, a rodeo rider, in 1967.

Mr. Wallace said he told Mr. Patterson where to spot a Bigfoot near Bluff Creek, Calif., Mr. Chorvinsky said.

"The fact is, there was no Bigfoot in popular consciousness before 1958," Mr. Chorvinsky said.

"America got its own monster, its own Abominable Snowman, thanks to Ray Wallace."

"He did it for the joke and then he was afraid to tell anyone because they'd be so mad at him," said Mr. Wallace's nephew, Dale Lee Wallace.

But Jeff Meldrum, an associate professor of anatomy and anthropology at Idaho State University, said he has casts of 40 to 50 footprints he believes were made by authentic unknown primates.

"To suggest all these are explained by simple carved feet strapped to boots just doesn't wash," Mr. Meldrum said, citing 19th-century accounts of such a creature.

National Post, with files from The Daily Telegraph and The Associated Press

QUEBEC

UFO information centre suffers \$100,000 in damage

MARICOURT • An information centre known as UFO land, which is run by the Raelian religion, was vandalized yesterday, with damage totalling more than \$100,000. The centre's security gate was knocked down by a pickup truck, and a white building, community centre and camper trailers were damaged by the truck.

NATIONAL POST, FRIDAY, NOVEMBER 8, 2002

NATIONAL POST, FRIDAY, DECEMBER 6, 2002

MARS GOT ITS WATER FROM ASTEROIDS, STUDY SAYS

UNLIKELY TO SUPPORT LIFE

BY PAUL REGER

WASHINGTON • Mars never had oceans as some researchers have claimed, but instead is a cold, dry planet that was pounded by water-bearing asteroids and showered with scalding rain that carved vast gullies and valleys. This suggests the Red Planet was a less than favourable place for life as we know it, a new study claims.

The study, appearing this week in the journal *Science*, sheds new light on a continuing debate by researchers about how much water there was on Mars, where it went and how it formed the planet's intricate pattern of canyons, river beds and deltas.

Using Mars photos and computer simulations, researchers at the University of Colorado at Boulder concluded that immense asteroids pounded Mars some 3.6 billion years ago, bringing vast quantities of water to the young planet and releasing powerful shock waves of heat that melted existing underground deposits of ice.

Owen Toon, senior author of the study, said at least 25 craters on Mars were gouged out by asteroids about 100 to 250 kilometres in diameter. The impact of such large space rocks would have propelled into the atmosphere millions of tonnes of superheated rock vapour and melted ice. It also would have unleashed a blast wave heated to more than 2,200 C and blanketed the entire planet with heated rock hundreds of metres thick.

"The atmosphere would be hotter than a self-cleaning oven," said Toon. "When the water was released from the atmosphere, it would fall as scalding rain."

The blanket of hot rocks "would be a global thing, causing rivers

to form anywhere. The ice would be melting all over the planet," he said.

Based on the erosion features on Mars, researchers estimated that after a major impact, more than 45 metres of water would flow in some areas, carving the river-like features. By some calculations, they said, there could be many decades with rainfall of almost two metres per year.

Between impacts, Toon said, Mars would eventually cool, turning again into a dry, chilled planet with water present only as sub-surface ice.

"We believe these events caused short periods of a warm and wet climate, but overall, we think Mars has been cold and dry for the majority of its history," said co-author Teresa Segura.

Toon said that since the moist and warm periods were short, the conditions were not favourable for life to evolve on the planet's surface.

Peter Smith, a University of Arizona planetary scientist, said if warmth and liquid water were available on Mars only episodically, "then you have a pretty gloomy picture for life."

But Smith said there were other forces on the planet, particularly volcanic action, that may have created subsurface pools of water where microscopic life could have lived.

"In my opinion, they haven't closed the book on the prospects for the evolution of life on Mars," he said.

Smith applauded the study, saying, "Assuming their calculations are correct, this must have happened on Mars."

Ronald Greeley, a planetary researcher at Arizona State University, said the study by Toon, Segura and others "has the potential to tie together several loose ends regarding Mars surface history." Water ejected into the atmosphere by asteroid impacts, he said, "could account for many of the apparently water-eroded features."

However, Greeley said the study "doesn't put a nail in the coffin" for evolution of life on Mars. Like Smith, he said hydrothermal systems powered by volcanic action and subsurface brine pools could still exist and would be favourable for the evolution of life.

The Associated Press

Continued from previous page

"There were also suggestions that fireball activity might explain some of the lights," one departmental report says.

"In the absence of any hard evidence, the MoD remains open-minded about these sightings."

National Post

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NATIONAL POST, WEDNESDAY, DECEMBER 4, 2002

Telescope to zoom in on lunar landings

Scientists hope to kill conspiracy theory

By ROBERT MATTHEWS

LONDON • Conspiracy theorists, you have a problem. In an effort to silence claims the Apollo Moon landings were faked, European scientists are to use the world's newest and largest telescope to see whether the spacecraft are still on the lunar surface.

For years, doubters have claimed NASA, the U.S. space agency, spent billions of dollars faking the landings to convince the world it had beaten the Soviet Union to the Moon. A host of supposed evidence has been put forward, ranging from the absence of stars on any photographs taken by the astronauts to the fact that the Stars and Stripes they planted seemed to flutter in a vacuum.

Earlier this month, NASA tried to put an end to the controversy by commissioning a definitive account of the evidence for the landings. Days later, it dropped the idea after criticism that it was wasting money by taking on the lunatic fringe. Naturally, this only boosted claims that the space agency was trying to hide some-

thing. The controversy even boiled over into personal conflict in September when police in Berkeley Hills were called in to investigate claims that Edwin "Buzz" Aldrin — the second man on the moon — punched a conspiracy theorist who accused him of lying about the landings.

Now astronomers hope to kill off the conspiracy theory once and for all by using the Very Large Telescope (VLT) — by far the world's most powerful telescope in the west — to spot the Apollo lunar landers.

Operated by European astronomers in the Chilean Andes, the VLT consists of four mirrors eight metres across linked by optical fibres. It can see a single human hair at a distance of 16 kilometres.

Such astonishing resolution should enable it to see the base of one or more of the six lunar modules NASA insists landed on the moon between 1969 and 1972. Any images of the modules would be the first not to have been taken from space by NASA.

Dr Richard West, an astronomer at the VLT, confirmed his team was aiming to achieve "a high-resolution image of one of the Apollo landing sites."

The first attempt to spot the spacecraft will be made using only one of the VLT's four telescope mirrors, which are fitted with special "adaptive optics" to cancel the distorting effect of the Earth's atmosphere. A trial run of the equipment this summer produced the sharpest image of the moon taken from the Earth.

The VLT team hopes to improve on this, with the aim of detecting clear evidence for the presence of the landers. The base of the lunar modules measured about three metres across, but would cast a much longer shadow under ideal conditions.

The Sunday Telegraph

Britain to open UFO files

BRITAIN The government is to publish files on reported UFO sightings as part of a shakeup of its laws on freedom of information.

Among the documents to be published is the Rendlesham File, which deals with one of Britain's best-known sightings of an unidentified flying object.

Until now, only about 20 members of the public have seen the file, which relates

to a sighting in Rendlesham Forest, Suffolk, eastern England, in 1980.

According to some UFO enthusiasts, eyewitnesses, including U.S. officers at a nearby military base, saw a brilliantly lit spaceship land in the forest on two consecutive nights.

Skeptics say the witnesses were fooled by the beam from a lighthouse.

Reuters

Man joins machine: connecting humanity to silicon life forms

Getting machines to communicate their needs to us

By JOIA SHILLINGFORD

It is 9 p.m., you have just arrived home after work, and the phone rings: It is your car saying you have left the lights on. By 2005, the must-have gadgets will not be cellphones, they will be everyday devices with mobile chips built in.

So says Deloitte Research in a new report, *Mobilizing the Machine* (details at www.dc.com). It is not alone in predicting a combination of telematics (sending telecom signals from machines)

and cellular technology will create new business markets.

"The biggest opportunity will become connecting man with the silicon life forms on the planet: vending machines, aircraft, cars, personal computers and home appliances. By 2005, most appliances will be supplied with integrated mobile connectors," says Wolfgang Grulke, chairman of Future-World, the business and technology think tank in Irving, Tex. "The market is huge: Already today our planet is inhabited by some 50 billion machines."

Martin Heath, a managing director of Atos KPMG Consulting, says he is already talking to companies about ways to cut costs or increase revenues by embedding mobile chips into their products. For example, he says, "a photocopy company that leases its

machines and charges per copy, loses money every time a copier is out of order.

"Imagine how much more money it could make if every time a machine was out of order, it sent a mobile text message to the service centre describing the fault and the new part needed. An engineer could be dispatched immediately with the right part or, in some cases, the problem could be fixed remotely over the air."

Mr. Heath estimates embedded chips and software currently cost about US\$10 but will come down in price. However, he believes that widespread adoption is a few years away because it is much cheaper to build in the chips when a machine is made than to add them on later.

Paul Lee, author of the Deloitte report, says many have made

their fortune by successfully exploiting innovations in communication, and that our lives are inextricably linked with machines — with machines currently outnumbering humans by at least four-to-one.

Mr. Lee says the core players in the embedded mobile industry will be network operators, cellular device vendors, original equipment manufacturers (OEMs) and specialist service providers.

But what kind of communication will they be enabling? According to Deloitte, cars could automatically dial for help in an emergency or, in a lesser accident, be diagnosed and fixed on the move; patients could wear monitoring devices that communicate with the doctor instead of being restricted to a hospital bed; and vending machines

could tell their owners when they run out of change or have their prices modified remotely. Personal digital assistants could also back themselves up by communicating with a PC overnight.

This may sound futuristic, but already 4% of vending machines are already mobile-enabled, says the United Kingdom-based Arc Group, which expects this to increase to 38%, generating US\$3-billion in revenue by 2006.

One thing to consider is a prediction from U.S.-based Forrester Research: "There will be more invisibly connected [communicating] machines and physical objects than visible humans from 2005 onward."

Let's hope they have fewer misunderstandings than human beings do.

Financial Times

Black hole heading in Earth's direction

A black hole is streaking through the Milky Way galaxy at 400,000 km/h, dragging an aging star along to snack on as it heads in Earth's general direction, astronomers said yesterday.

However, the matter-sucking drain will get no closer to our solar system than 1,000 light-years, and that will not happen for 200 million years or so. Right now, it is between 6,000 and 9,000 light-years away.

A light-year is about 9.6 trillion km, the distance light travels in a year.

Still, astronomers in France and Argentina using the orbiting Hubble Space Telescope to track the black hole, GRO J1655-40, are excited about it, because it gives them the best evidence yet that it was created when a star several times the mass of our sun blew up in a vast explosion known as a supernova.

The hole's companion star, which revolves around it every 2.6 days, managed to survive the blast only to spend its declining days being nibbled to death.

Reuters

Dark streaks running down the slopes of equatorial canyons and craters on Mars could be signs that underground water is seeping to the surface, a member of a scientific research team said yesterday.

This does not mean there is water close to the surface of Mars in a form that would be useful to living things or potential human visitors, scientist Justin Ferris said.

"People who have visions of going to Mars and drilling down and hitting water . . . we're going to have to invent some big technologies for that," said Ferris, a researcher at the U.S. Geological Survey in Colorado.

But Ferris said the research, presented this week at a meeting of the American Geophysical Union, was exciting because it hinted at sub-surface water moving around Mars' mid-section.

Water searched for

Astronomers have long searched for signs of water on and below the Martian surface, since water — not ice — is seen as a requirement to supporting life as it is known on Earth. Many

scientists believe Mars was once wet and warm enough to support life, though its surface is now cold, dry and inhospitable.

The research by Ferris and scientists at the University of Arizona used high-resolution images of Mars that show dark streaks more than 500 yards long running down the walls of craters and canyons.

Ferris and his co-authors believe the streaks are signs of movement of super-salty water under the Martian surface and its interaction with molten subsurface rock called magma.

Reuters

Metro
DECEMBER 12, 2002

A few spins around a star and a planet is born

BY MARGARET MUNRO

The biblical story that Earth was created in a week is still a bit of a stretch, say scientists, but new research indicates that giant planets like Jupiter and Saturn formed in just a few hundred years — not millions of years as previously believed.

The Canadian and U.S. astrophysicists used computer models to show how debris swirling around newly formed stars creates huge planets. Their findings appear today in the journal *Science*.

"We've had as many as 13 planets form around a single star," says co-author James Wadsley, a post-doctoral fellow at McMaster University, referring to the team's computer simulation that mimics, and greatly speeds up, what they believe happens in reality.

He and his colleagues at the University of Washington and University of Victoria used millions of bits of information on what is known about the forces at work in the heavens to create their computer model. They then sat back and watched.

Their work suggests gas swirling around new stars — if it is cold enough — creates huge ripples and starts to produce planets after just a few spins around the star.

The findings could explain why so many giant planets have been found orbiting other stars. Astronomers have spotted about 100 so-called "extra-solar" planets, the size of Jupiter or bigger, in the last few years. The work also goes a long way toward explaining what has puz-

zled astronomers for decades: how Saturn and Jupiter, which are huge balls of condensed gas containing 93% of the planetary mass in our solar system, were formed.

The new research suggests two planet-forming processes are at work in the creation of solar systems. One generates gas planets, such as Jupiter, and another creates rocky planets, such as Earth.

The gas giants form early in the solar system evolution from discs of cold gas left after stars form, Wadsley says.

The rocky planets follow the more traditional model — cosmic dust and gas around the new star slowly form into rocks, which clump together to make planets after more than a million years.

The fate of the rocky planets is very much affected by the gaseous planets, Wadsley says, noting the incredible gravitation forces exerted by planets like Jupiter help clear new solar systems of "junk," like comets, that might otherwise slam into planets. (It is believed something about the size of Mars smacked into the Earth at one point, kicking up the debris that eventually created the moon.)

While the new simulation on the birth of gaseous planets needs further refinement, Wadsley says the model is conservative and abides by the laws of physics. So the outcome — fast formation of gaseous planets — is not likely to change as the model improves, he says.

Wadsley has used the data from the new simulation to produce images and videos of the planet-forming process that would do Hollywood proud. One 25-second clip, which can be downloaded off his Web site at <http://imp.mcmaster.ca/images/>, shows six planets forming from ripples in a disc of gas swirling around a star.

In a bid to better understand the universe, he is also simulating — and producing — videos of colliding galaxies.

While astronomers do not yet have the technical ability to see planets smaller than Jupiter in other solar systems, Wadsley says he thinks it is "incredibly likely" that smaller, rocky extra-solar planets do exist. "That's the Holy Grail of all this," he says, "to see if we can detect solar systems like our own with Earth-like planets."

Going up? Space elevator wins support

U.S. company builds on a Russian idea

BY DAN ROWE

The fantastic notion of a space elevator — a concept that first appeared in a Russian technical journal in the early 1960s and then crept into the works of science fiction author Arthur C. Clarke in the 1970s — could be a reality before long.

Seattle-based HighLift Systems

is hosting a conference this week to meet with investors and other parties potentially interested in a device that could open the final frontier to the masses within 15 years because of the space elevator's relatively low costs and extremely high traffic volume.

NASA has given HighLift a US\$570,000 grant to continue research into the elevator and the company has received an indication of support from the European Space Agency, which has representatives attending the Seattle conference.

"With a system as inexpensive as ours, every nation could have a space program. Most universities could have a space program. And a few corporations could have their own space program," said Michael Laine, the company's president.

"We're bringing it down to the level where maybe not everybody, but an awful lot of people can have access to space in a realistic way."

NATIONAL POST,
TUESDAY, AUGUST 13, 2002

Ecologists say it's time to colonize other planets

WORLD WILDLIFE FUND

BY JOSEPH BREAN

The human race must either abandon its wasteful ways or find two more planets to colonize by 2050, the World Wildlife Fund will warn today in a report.

The authors of Living Planet 2002 studied global environmental data and pegged 2050 as the year after which the Earth and its myriad species will no longer be able to absorb the impact of human industry. To compensate would require two additional planets, they say.

The report, which details the effects of Western consumption on pollution, forest cover and biodiversity, and then makes projections based on these details, is to be released today in Geneva, Switzerland.

Extraterrestrial colonization is an unlikely solution, the authors admit. A suitable, solid planet, with a mass close to Earth's and temperatures that would allow liquid water, has not even been discovered, let alone discovered within a practical distance for any known mode of transportation.

With this in mind, Martin Jenkins, a senior advisor on biodiversity for the United Nations Environment Programme and an au-

thor on the report, said his stark ultimatum is clearly one-sided; people, especially Westerners, must consume less.

"Nobody's suggesting that anyone martyr themselves," he said. "One simply isn't going to turn the entire population of the West into ecologically minded ascetics overnight, but if you can get people to register that it's not a free trip then you'll start getting there."

Another expert on climate change said the "doomsday" prediction is not the best tactic for fostering responsible stewardship of our environment, and is only one of many competing predictions for our future environmental impact.

"From an academic, scientific point of view, it's a bit simplified," said Ian Burton, a policy expert at the University of Toronto's Institute for Environmental Studies. "It's based on the assumption that no changes will be made.... Things are changing, of course, and great efforts are being made. Then you take your pick and have your choice whether the efforts are sufficient and are they rapid enough? Frankly, nobody really knows."

Dr. Jenkins said his study will reveal a sharp decline in the Earth's ecosystems since 1970, with a 12% reduction in forest cover and a reduction in biodiversity of 33% in the oceans and 55% in freshwater systems. Freshwater species suffer the worst, he said, because of their proximity to humans and our constant need for fresh water.

"We don't know what will happen [by 2050] ... but you follow the straight line down and you come to zero quite soon," he said.

Dr. Burton doubted whether future environmental degradation will follow a straight line. "The consequences of the more cata-

strophic kind probably are much longer into the future and much less likely," he said.

The report comes just weeks before next month's Earth Summit in Johannesburg, South Africa, a major meeting dogged by fears that nothing substantial will be accomplished and that George W. Bush, the President of the United States, might fail to attend.

Dr. Jenkins' projections on biodiversity fall in line with the documented decline in the populations of many species since the "Living Planet Index," a representative number computed from the populations of 350 species, was first recorded.

"For any given thing out there, its population has declined by 30% since 1970 [on average]," Dr. Jenkins said.

For cod in the North Atlantic, among the world's most heavily overfished species, stocks have fallen from an estimated 264,000 tonnes in 1970 to under 60,000 in 1995.

In Canada, Dr. Burton said, the most noticeable effects of environmental degradation might be less snow in the Rockies and thus less spring runoff into the Prairies for irrigation, a risk of lower water levels on the St. Lawrence affecting navigation in the port of Montreal, and uncertainty about hydro-electric power generation in James Bay.

National Post

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Metro
DECEMBER 20, 2002

Hubble spies birth of galaxy

SPACE A tiny, late-blooming galaxy - a distorted clump of gas and stars whose development lags behind its galactic cousins - has been captured in Hubble Space Telescope images released yesterday.

Known as POX 186, the infant galaxy probably formed when two smaller cosmic clumps collided to create a burst of star formation less than 100 million years ago, the Space Telescope Science Institute said in a statement.

Most larger galaxies, including our own Milky Way, are thought to have formed most of their stars billions of years ago.

POX 186 is miniscule by cosmic standards, only 900 light-years across. A light-year is about 9.6 trillion km, the distance light travels in a year.

Images and details are available at <http://hubble-site.org/newscenter/>

• NATIONAL POST, FRIDAY, AUGUST 25, 2000

Man to dig for treasure he buried in a past life

BY RICHARD SAVILL

LONDON • A U.S. businessman has been given permission to dig up part of a park in Wales in a search for treasure he says he buried in a past life.

Jim Bethany believes he was previously a Welsh soldier called John Seaman and died in 1815 at the Battle of Waterloo. Mr. Bethany, 48, who has had regression hypnotherapy, says he buried silver coins and jewellery under what is now Singleton Park, Swansea, in

South Wales. City council has given him permission to dig up an area of about four square metres.

Mr. Bethany, an antiques dealer from New York, spent five days exploring the site. He came to believe he had lived in Wales after being "regressed" to a past life during a hypnotherapy session.

Malcolm Ridge, chairman of the local historical society, said: "He says he found treasure while fighting in India. He brought it back ... and buried it, with the aim of retrieving it later, but got shot."

The Daily Telegraph

NATIONAL POST, THURSDAY, MAY 16, 2002

Congressman's bill aims to send humans to Mars

HOUSTON • A Texas congressman filed legislation yesterday that would set NASA on a course to reach Mars with human explorers within 20 years. Nick Lampson, a Democrat whose district includes NASA's Johnson Space Center in Houston, said his bill, The Space Exploration Act, aims to give new focus to the financially troubled U.S. space program.

THE SUN IS CHANGING AND THE RADIATION AND HEAT WILL EVENTUALLY KILL US

THIS is going to be the weirdest article you've ever read! In fact, before you go on, I strongly suggest you finish reading the rest of this daily, then come back...because if you don't, and carry on reading this, you might be tempted to prematurely trash this newspaper!

In order to "put you in the mood" for what I am about to say, we have to establish three important points:

1) The Sun is changing...ever so slowly, but it is definitely changing. Our latest estimates give it another 4.5 billion years of life. Its fate will be to slowly expand something it is doing now, and eventually the amount of radiation and heat that we receive will actually kill us...after that the sun will grow so big it will actually "swallow" Mercury, Venus, Earth and Mars!

2) Skin cancer, bad sunburns, eye problems and health disorders due to overexposure to raw sunlight is growing faster than any of us imagine. Ask any skin doctor. Never before in the history of medicine has there been so many cases of skin cancer as now. The causes are clear - ozone depletion in the upper atmosphere is letting in much more powerful and very harmful ultraviolet sunlight, coupled to that is the increase in radiation intensity due to ever greater and more violent sunspot activity explosions and massive out gassings of plasma, gamma rays and immense magnetic fields from the surface of the sun.

3) With the mapping of the human genome and the development of genetic engineering, we have arrived at the point where we MIGHT be able to do something about those

subtle changes mentioned above. Those changes will not wipe us out now - it will do and IS doing us a great deal of damage NOW, but come several thousand or millions of years down the road, and the summer sun we have today will bear NO relation to the summers we'll endure in the not too distant future.

THERMONUCLEAR

WAR:

If we don't blast ourselves off the face of this planet through political or religious folly leading to an all out nuclear war, then eventually our sun will.

The devastating blasts of Hiroshima and Nagasaki in 1945 erased two major cities off the map in a matter of seconds! Over 50,000 souls in each town were "rubbed out". The most amazing aftermath of both those cataclysms was the fact that a great majority of the INSECTS in the area SURVIVED!

If you visit Chernobyl, both immediately after the nuclear reactor went "super-nova" and today, you will see that the local insect population survived completely unscathed, while over 20,000 people were and are directly affected by the radiation.

Radiation? Gamma Rays? Cosmic Rays? X-Rays? Confused? Well, put simply, radiation is nothing more than a stream of subatomic "bullets" - actual physical ultratiny particles that carry a very strong energy and electric charge - some are "positive" charged bullets - called protons - these are "heavy" bullets - the stuff that make up the nucleus or centre core of atoms, and they attract very strongly negatively charged electrons. Another form of radiation are electrons - millions of times smaller than protons,

these are also powerful negatively charged "bullets" that repel other electrons or bang into atoms and actually change their properties! Another type of "bullet" is the neutron, with a neutral electrical charge, but lots of kinetic energy, neutron radiation is something like bowling...when they hit an atom, all hell breaks loose!

For some reason, our "soft" cell makeup, the bone, muscle and other specialised cells that finally make up a complete "you" are very sensitive to all kinds of the radiation mentioned above. Those "bullets" can actually - and do - punch holes in your cells, blasting away some of the genetic inside cell structure, and in some cases, causing the cell to "go ballistic" - i.e. cancer, or simply die.

Put briefly, radiation sickness is where you have been hit with such a barrage of "artillery fire" that your cells either die, malfunction, or multiply non-stop creating multiple tumours almost anywhere in your system, giving you poor chances of survival.

Insects mysteriously seem to have a cell structure that is almost "immune" to many kinds of radiation. They display an amazing capacity to endure very strong doses of radiation for short periods of time.

Put simply, after an all-out thermonuclear war, the only survivors who could thrive on this planet bristling with radiation would be insects and some land plants and marine, deep ocean organisms.

If common sense finally seeps into the heads of all world politicians and religious leaders, and no world war three ever occurs, our own sun eventually will bombard us with enough increased radiation over the next few million years to present a very serious survival threat to us all.

weekly the stars at night

CREDIT: GLORIA ALDERSON

by Roberto Gourlay

SOLUTION:

Engineer human beings to have a physical cellular makeup that can withstand much higher doses of radiation without suffering any harm!

PEOPLE INSECTS?

To understand this concept, let's talk about music. In the 1920s and 30s, if you wanted to hear your favourite "swingin' 20s" hit songs, you grabbed a thick, heavy, fragile 78-rpm record, plopped it on a wind-up turntable and carefully placed a needle that looks like a small nail in the grooves. The sound was tolerable, but incredibly primitive by today's standards.

In the 40s and 50s, vinyl 33-rpm records came into being, and in the late 50s, stereo was invented along with the ever-growing popularity of the plastic 45-rpm disc! The same music now could be heard in much better quality. In the 60s, cassette and reel-to-reel magnetic tape became widespread; offering longer playing times and in some cases, even better sound quality. In the early 70s, quadraphonic or 4 channel stereo made a weak debut - the idea was great but it was too much money for the average audiophile, so it died out.

The 80s and 90s saw the digital CD format take hold, then the Mini-CD, offering impeccable sound quality. Now we have the DVD - digital videodisc where we have perfect sound AND images. There are also pure solid state "memory" devices that store and reproduce digital sound and images perfectly

- I use this system every time we record the TV show "Ciencia y Vida" on TV Inca.

What I am trying to get at here is to show you that there are several completely different and distinctive FORMATS that can function, reproduce and perform perfectly sound and vision. In the future, our mobile phones will have it, and our major home systems will be not only in stereo, but also in THREE DIMENSIONS.

Therein lies the solution to our problem of survival into the long long and I mean LONG distant future. Change our format. If you listen to The Beatles "She Loves You" on reel to reel master tape at 15 inches per second, or a CD, or a MINI-CD, or on a DVD, or on a solid state digital memory device, there is practically no difference! Same voices, same sound.

The human mind is really the only organ we will have to "re-format", while our other bodily functions can be duplicated using "existing" systems we could engineer from other life forms - insects and marine organisms.

People Insects? Legends have it that "Extraterrestrials" LOOK a lot like insects - big black eyes, thin, tough "skin", skinny limbs that look similar to insect legs, featureless faces etc...maybe that is the best "format" to survive in a universe permeated with ever - increasing radiation levels.

Frankenstein fantasy you say? One thing is certain - we bear absolutely NO resemblance to the small, furry mammals that survived the "dinosaur holocaust" 65 million years ago. I predict that a million years from now, we will bear little or possibly no resemblance to the "human being" of the future!

MAJORCA DAILY BULLETIN Sunday, June 17, 2001

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B.C. meteorite may provide clues to origins of life

FELL TO EARTH IN 2000

Pockets of hydrocarbons formed before our solar system was born

BY CHARLIE GILLIS

The remains of a meteor that exploded three years ago over a remote lake in northern British Columbia contain previously unseen organic material that could lead scientists to the origins of life, NASA researchers say.

Tiny globules of hydrocarbons in the Tagish Lake meteorite — a mass of rock that broke apart upon entering the Earth's atmosphere in January, 2000 — were formed long before our own solar system and would have made ideal homes for primitive organisms, say scientists for the U.S. space agency.

"These globules would have served very well to protect and nurture primitive organisms on Earth," said Michael Zolensky, a NASA geochemist who co-authored the paper. "They would have been ready-made homes for early life forms."

"If, as we suspect, this type of meteorite has been falling on to Earth throughout its entire history, then the Earth was provided with these hydrocarbon globules at the same time life was first forming here."

The group's findings, which appear in this month's *International Journal of Astrobiology*, represent the latest advance stemming from a remarkable collection of space rock found on the ice of Tagish Lake, a winding waterway that spans the B.C.-Yukon boundary.

The Tagish Lake meteorite left behind some of the oldest and scientifically valuable matter ever found on this planet, after its spectacular arrival in northwestern Canada.

Estimated to weigh 200 tonnes before entry, it exploded into smaller bits about 25 kilometres above the Earth's surface. Many of the pieces landed on the ice of the lake, where they were easy to spot and identify.

A local outdoorsman picked up pieces within days of its arrival and scientific teams followed in the spring after the snow melted off the ice. In all, collectors plucked about 12 kilograms of rock from the lake's surface.

Since then, scientists have pored over the pieces, prying at the geological and biological secrets inside.

The uncommonly fine condition of the rocks has helped, said Mr. Zolensky, who works at NASA's Johnson Space Center in Houston, Tex. Most meteors, he said, break and burn into dust as they enter the atmosphere, scattering any organic material they happen to be carrying.

The bubble-like pockets of hydrocarbons that survived on these pieces offer a range of fascinating possibilities, pre-dating as they do the Earth, its planetary neighbours and even the sun itself.

According to the NASA group, the globules almost perfectly reflect those created last year by their colleagues in Moffett Field, Calif. Those NASA scientists had set out to reconstruct conditions leading to early life forms, using only materials that were present in the early solar system and interstellar space.

"What we have now shown is that that these globules were in fact made naturally in the early solar system, and have been falling to Earth throughout time," Mr. Zolensky said.

Richard Herd, curator of the National Meteorite Collection at the Geological Survey of Canada, responded cautiously to the findings, emphasizing that any connection between the Tagish Lake meteorites and the beginnings of life itself remains speculative.

But he welcomed the latest of what could prove many discoveries wrought by the meteor.

"What findings like this will do is seed more research," Mr. Herd said. "By making observations as to what [the globules] might be, you start the 'Oh yeah?' factor. Others may begin looking at this stuff and come up with other conclusions, and it will push the inquiries further."

The beauty of the Tagish Lake meteor, he added, is its seemingly limitless range of research possibilities.

"Tagish Lake can't be pigeon-holed," he said.

"It's unique in a number of ways, based on the way it's put together, in its minerals and its carbon compounds.... The thing about this meteorite and other meteorites that have been found is that they contain pre-solar grains. So you're not just looking at the processes that formed our solar system any more — or even the formation of life in our solar system."

"You're looking at processes occurring in the galaxies, which then lead to [the creation of] stars and planets and whatever happens after that."

National Post

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Second moon in 600 years

BY MARY VALLIS

Earth may have a second moon in 600 years, an international research team has found.

A tiny asteroid — so small it would fit inside Toronto's SkyDome — is expected to loop around Earth for about 40 years at that time before resuming its usual orbit around the sun.

"The asteroid will appear to orbit the Earth at that time, but in fact it will be too far away to be considered a true satellite of our planet," said Paul Chodas, a researcher at NASA's Jet Propulsion Laboratory in Pasadena, Calif.

The asteroid, called 2002 AA29, is also unique because it is the first found to revolve around the sun in nearly the same path as Earth. An international team investigating its movements say, relative to us, it usually traces a complicated horseshoe pattern.

"The asteroid itself is probably most interesting because it reveals that there's all kinds of new, unexpected behaviour in the solar system," said Paul Wigert, an astronomer at Queen's University in Kingston, Ont., and a member of the research team.

"This kind of stuff is actually quite new. The solar system has been studied for hundreds of years and this type of behaviour has only come to light very, very recently. It's surprising that such a venerable part of physics and astronomy still has some surprises left for us."

The researchers say the asteroid is playing a cat-and-mouse game with Earth, approaching the planet first on one side, then the other. The asteroid will be at its closest point to Earth in nearly a century on Monday. That point, however, is still approximately 5.9-million kilometres away.

Then the asteroid will scurry away again because of the combined gravitational effects of Earth and the sun. It will next catch up with Earth in about 95 years.

"In some ways, the Earth and this asteroid are like two race cars on a circular track," Dr. Chodas said. "Right now the asteroid is on a slightly slower track just outside the Earth's and our planet is catching up."

"Unlike race cars, the two bodies will not pass when they approach each other," he added. "Instead, the combined gravitational effects of the Earth and sun will nudge the asteroid on to a slightly faster track just inside the Earth's, and it will begin to pull ahead."

NATIONAL POST, SATURDAY, JANUARY 4, 2003

Physicists get first glimpse of antimatter

STUFF OF SCIENCE FICTION

Torontonians among group making breakthrough

BY MARGARET MUNRO

An international team of physicists trying to unlock the mysteries of the universe — and explain why matter exists — has captured the first fleeting glimpse of the structure of antimatter.

The phantom substance, which has long intrigued scientists and science-fiction writers alike, is seldom seen or measured as it is annihilated as soon as it touches normal matter, releasing tremendous energy in the process.

A team of Canadian, U.S. and European physicists, working at the CERN physics facility in Geneva, is reporting in *Physical Review Letters* this week that it has created and probed atoms of antihydrogen.

"We know we are looking at them," said Eric Hessels of York University, in Toronto, who is collaborating on the experiments. "We have a very clear way of seeing these antihydrogen atoms. That's part of the breakthrough that we've had. We can count them one by one."

Incredibly, the scientists are able to probe the antiatoms as they travel a few centimetres toward the wall of the experimental apparatus in which they are made — a journey that takes roughly 30 microseconds.

"We apply an electric field to them that pulls them back apart," Prof. Hessels said. The scientists can infer the structure of the atoms by measuring how much energy it takes to pull them apart.

Prof. Hessels and his colleagues have worked for more than four

years on the project, which has so far created 1,400 atoms of antihydrogen. "This is an unimaginably small number of atoms," he said. But enough to provide new insight into antimatter.

Science-fiction writers like to propel imaginary spaceships around the galaxies using antimatter. In reality, though, physicists do not understand why there is not more antimatter in the universe. Their theories suggest the Big Bang created equal amounts of matter and antimatter. Several physics teams are running experiments that should explain where all the antimatter has gone.

Matter and antimatter are believed to be opposites that destroy each other. "If they ever get together, they annihilate each other, but otherwise they are pretty much equal," Prof. Hessels said.

Understanding the differences between hydrogen and antihydrogen might help explain why matter is so much more common than antimatter in the visible universe. And if antihydrogen responds differently to gravity, that will raise questions about the validity of the theory of relativity.

"One of the more interesting things people have thought about is whether antimatter will be gravitationally attracted to matter, or will it be repelled," Prof. Hessels said. "Will antimatter fall up or fall down?"

In a bid to find out, he and his colleagues hope to capture antihydrogen atoms and suspend them indefinitely in a magnetic field. "We believe we'll be able to hold them for at least months at a time," he said.

He does not anticipate practical applications for antimatter any time soon. The idea of using antimatter to power spaceships remains science fiction, since it takes such incredible amounts of energy to produce antimatter in the first place.

Some scientists have suggested that pockets of the universe could be made of antimatter, but Prof. Hessels believes it is highly unlikely. "Those pockets would have to intersect with parts of the universe that are made of regular matter," he said. And when they intersect, the resulting burst of energy would be visible to astrophysicists. "But we don't see them."

National Post

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NATIONAL POST, WEDNESDAY, OCTOBER 30, 2002

- NATIONAL POST, THURSDAY, NOVEMBER 8, 2001

UNITED STATES

Risk of asteroid hitting Earth in next century is one in 5,000

PRINCETON, N.J. • The risk of an asteroid colliding with Earth during the next century is one in 5,000, much lower than previously believed, according to researchers at Princeton University. Astronomers using data from a new survey of the sky concluded the solar system has about 700,000 asteroids big enough to destroy civilization.

NATIONAL POST, TUESDAY, NOVEMBER 19, 2002
AUSTRALIA

Scientists find bones of plesiosaur that resembles Nessie

SYDNEY • A 120-million-year-old plesiosaur resembling Scotland's Loch Ness Monster and possibly new to science has been discovered in the central Australian outback, scientists reported yesterday. The fossilized bones of the seven-metre creature were found by four scientists from the South Australian Museum in the far north of South Australia state.

NATIONAL POST, THURSDAY, NOVEMBER 28, 2002

ALBERTA

Scientists hope pictures will prove meteorite discovery

EDMONTON • Scientists hope their photos of a fireball that blazed in the sky yesterday morning may lead them to a rare meteorite. A camera on the University of Alberta physics building recorded the object for about seven seconds. It was bright enough to indicate it may have survived the descent. About 50 meteorites have been discovered in Canada.

International U.F.O. Museum Opened In Istanbul

ISTANBUL, Jan 18 (A.A) - International UFO Museum was opened in Istanbul on Friday by the Sirius UFO Space Sciences Research Center.

Haktan Akdogan, the chairman of the research center, said that the fourth UFO museum was inaugurated in Turkey following the United States, Japan and Britain.

Akdogan noted that the visitors could see all the documents which had been hidden from the public so far.

In the museum, imitation of Roswell incident by models, imitation of an experiment made by aliens on an abductee, imitation of creation of a hybrid of aliens and humans, statues of various types of aliens, models of various types of UFOs, the models of archaeological ruins/traces/marks which reveal the UFO phenomenon, a number of photographs, documents and newspaper and magazine articles on UFOs will be displayed.

There are a library where almost a thousand books on UFOs are displayed and a cinevision hall on the second floor of the museum.

The museum will be open between 11.00 a.m. till 8.00 p.m. every day except Monday.

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